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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,405	06/08/2001	Peter R. David	22700-708	7697
21971 75	590 10/01/2002			
WILSON SO	WILSON SONSINI GOODRICH & ROSATI EXAMINER			
650 PAGE MILL ROAD			KUNEMUND, ROBERT M	
PALO ALTO, 0	CA 943041050		RUNEWIOND, ROBERT W	
			ART UNIT	PAPER NUMBER
			1765	
			DATE MAILED: 10/01/2002	$\wp$

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	- Con
	<del>,</del>	09/877,405	DAVID ET AL.	
Office Action Summary		Examiner	Art Unit	
		Robert M Kunemund	1765	
Period fo	The MAILING DATE of this communication a or Reply	ppears on the cover sheet	with the correspondence address	S
THE I - Externanter - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION masions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by state to reply within the set or extended period for reply will, by state ply received by the Office later than three months after the main dispatent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may eply within the statutory minimum of d will apply and will expire SIX (6) N tute, cause the application to become	r a reply be timely filed thirty (30) days will be considered timely. IONTHS from the mailing date of this commure ABANDONED (35 U.S.C. § 133).	nication.
1)⊠	Responsive to communication(s) filed on 3	<u>1 January 2002</u> .		
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠	This action is non-final.		
3)□ Dispositi	Since this application is in condition for allo closed in accordance with the practice und on of Claims	wance except for formal r er <i>Ex parte Quayle</i> , 1935	natters, prosecution as to the me C.D. 11, 453 O.G. 213.	rits is
4)⊠	Claim(s) <u>1-45</u> is/are pending in the application	ion.		
	4a) Of the above claim(s) is/are withd	rawn from consideration.		
5) 🗌	Claim(s) is/are allowed.			
6)⊠	Claim(s) <u>1-45</u> is/are rejected.			
7)	Claim(s) is/are objected to.			
	Claim(s) are subject to restriction and	I/or election requirement.	•	
Applicati	on Papers			
	The specification is objected to by the Exami			
10) 🔲 -	The drawing(s) filed on is/are: a)□ ac			
40.	Applicant may not request that any objection to			
11)	The proposed drawing correction filed on		disapproved by the Examiner.	
40\□ -	If approved, corrected drawings are required in	. •		
	The oath or declaration is objected to by the	Examiner.		
	inder 35 U.S.C. §§ 119 and 120			
_	Acknowledgment is made of a claim for fore	ign priority under 35 U.S.0	C. § 119(a)-(d) or (f).	
a) <u>[</u>	☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority docume			
	2. Certified copies of the priority docume			
* S	3. Copies of the certified copies of the present application from the International Ree the attached detailed Office action for a life.	Bureau (PCT Rule 17.2(a)	).	e
14)∐ A	cknowledgment is made of a claim for dome	stic priority under 35 U.S.	C. § 119(e) (to a provisional app	lication).
a)	n ☐ The translation of the foreign language packnowledgment is made of a claim for dome	provisional application has	been received.	,
Attachment	(s)			
2)  Notice 3)  Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	w Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152	
I.S. Patent and Tr PTO-326 (Rev		Action Summary	Part of Pape	er No. 6

Application/Control Number: 09/877,405

Art Unit: 1765

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 to 7, 11 to 15 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freud et al. in view of Wilson et al and Manz (5,180,480).

The Freud et al reference teaches a method of monitoring crystallization of protein crystals. Samples of the solution to be crystallized are placed in a microchamber. The samples are then treated so as to cause crystallization. The results are view by spectrometer to see the state of the crystallization and thus to monitor the growth of the overall solution, note, entire reference. The difference between the instant claims and the prior art is the use of lumens and method of

Application/Control Number: 09/877,405

Art Unit: 1765

determining crystallization. The Wilson et al reference teaches that many samples of protein solutions are taken and caused to crystallize under differing conditions, note page 417. The Manz reference teaches an apparatus with lumens to take samples of liquids; there can be multi cannels and divides, note figures. It would have been obvious to one of ordinary skill in the art to modify the Freud et al process by the teachings of the Wilson and Manz references to use lumens, channels and use different conditions in order to create a database of information to allow for crystallization to occur more often then not in protein growth and use lumens to better analyze the solid materials.

Claims 8 to 10, 22 to 37 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freud et al. in view of Wilson et al and Manz (5,180,480).

The Freud et al, Wilson et al and Manz references are relied on for the same reasons as stated, supra, and differ from the instant claims in the size of the apparatus and number of chambers. However, in the absence in the absence of unexpected, it would have been obvious to one of ordinary skill in the art to determine through routine experimentation the optimum, operable number of chambers and sizes in the combined prior art in order to allow for differing conditions and size enough to let the materials crystallize.

Claims 16 to 21, 38 to 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freud et al. in view of Wilson et al and Manz (5,180,480).

The Freud et al, Wilson et al and Manz references are relied on for the same reasons as stated, supra, and differ from the instant claims in the means to analyze.

Art Unit: 1765

However, in the absence in the absence of unexpected, it would have been obvious to one of ordinary skill in the art to determine through routine experimentation the optimum, operable means to analyze the solid materials in the combined prior art in order to ensure the results are accurate.

## Examiner's Remarks

The remaining references are merely cited of interest as showing the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M Kunemund whose telephone number is 703-308-1091. The examiner can normally be reached on 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ben Utech can be reached on 703-308-3636. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

**RMK** 

September 23, 2002

ROBERT KUNEMUND PRIMARY EXAMINER